

FULL-DIMENSION OPERATIONS PLANNING CONSTRUCTS: THINKING "OUT OF THE BOX" FOR THE 21ST CENTURY

A Monograph
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Special Forces



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I. INTRODUCTION

"The real challenge is not to put a new idea into the military mind, but to put the old one out. . . ."1

TRADOC Pam 525-5
Force XXI Operations
1 August 1994

The Revolution of Military Affairs (RMA), occasioned by technological advances and the shift-drift-rift of paradigms born of multi-polar world realities, is rich with vision, but hobbled by lingering Cold War mentalities. Nowhere is this more apparent today than in the way the U.S. Army approaches situation analysis and operations planning. Certain time-honored constructs, long ingrained in the Army's psyche from foot soldier to war-fighting four star, continue to survive as "inviolates"--somehow eternal despite compelling evidence to the contrary.

Three such "inviolates" are firmly entrenched as the critical "first steps" to successful operations. First is the inclination to perceive battlespace largely in terms of **PHYSICAL AREA**. Second is the instinctive tendency to analyze situations according to **METT-T**. Last is the nearly unqualified adoption of the seven **BATTLEFIELD OPERATING SYSTEMS (BOS)** as a universal planning and analysis construct.

The past success of these intellectual tools belies the reality that individually and collectively they are not adequate for addressing the dynamic dictates of *full-dimension operations*--the Army's acknowledged challenge of dominating the full spectrum of dynamic battlespace spanning the war-OOTW continuum.² It is thus the intent of this paper to illustrate the fundamental shortcomings of these old constructs in the light of

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20th Century events, as well as to deduce more comprehensive replacements equal to the task of serving commanders now and into an uncertain and challenging 21st Century.

II. THE MAN IN THE MIDDLE. . . ILL SERVED

"Everything comes to this: to be able to recognize the changed situation and order the foreseeable course and prepare it energetically."³

Field Marshall Helmuth Graf von Moltke

Today's tactical-level commander finds himself at an intellectual crossroads with inadequate analytical tools to chart his course. To be sure, there is no shortage of descriptive doctrine, as he is faced with mega-volumes and mega-bytes of it at every turn. His dilemma is seen in the Army Chief of Staff's depiction of him as the man-on-the-ground "at the nexus of, tactical operational, strategic and diplomatic" spheres.⁴ This reflects modern military reality in which a mis-aimed bullet, word or effort can have far-reaching consequences amplified under the media's microscope. Still he and his brothers are mainly on their own to "sort it all out" and come up with the practical steps essential to successful operations--whatever, whenever, and wherever they might be.

What then might these operations be? It is in answering this question fully and objectively according to the world "as is," that practical steps to success can be deduced--steps that are not so much a matter of a commander's personal ingenuity, but instead ones reflecting a scientific, methodical approach applicable for the "total force"--a force which faces the same future:

". . . The future strategic landscape will be varied and multi-faceted and have a greater potential for surprise across the operational spectrum. . . . while war will likely continue. . . . war is no longer deemed a productive means of pursuing strategic objectives. . . . during this period the United

States Army, along with other services, civil agencies, and nations will be called to defend and promote national and collective security interests throughout the world, often on short-notice and often in combinations of nations and armed forces previously not experienced."⁵

This vision and statement of purpose, however, is not backed up by utilitarian tools of analysis that aid "the man in the middle" and drive him to decision and decisive action.

FM 100-5, Operations (June 93), which is the Army's doctrine for "full-dimension operations," talks principally in terms of conventional combat, while devoting 8 pages to the topic of OOTW out of the manual's 153 pages.⁶ The Army's admission of this FM's shortfalls is demonstrated by the drafting of FM 100-20, Operations Other Than War.

The result is a flawed attempt to define full-dimension operations spread across two different publications. The Army Chief of Staff's comments below are instructive on the matter:

"Categorizing 'war' as separate from all other uses of the military may mislead the strategist, causing him to believe the conditions required for success in the employment of military force while one is conducting 'war' differ from use of military force in "Operations Other Than War."⁷

The commander who faces the prospect fighting a war with the accompanying dimensions of terrorism, insurgency and humanitarian assistance (to name but a few plausible OOTW add-ons) hardly needs disjointed doctrine and certainly could benefit from multi-purpose analytical tools. These are essential in picking apart multi-faceted situations and turning available information into decision. Rather than lament the realities of evolving doctrine, it is instead more important to accept the flux and, as TRADOC PAM 525-5 proposes, stress "principles to be learned and understood. . . and translated into action in scenarios that cannot be predicted. . . "⁸ It is in this light of

dynamic, practical principles translatable into action that "men in the middle" will not be *ill-served*, but rather *well served*. Thus the challenge for "nexus man" is to find flexible analytical constructs that enable him to process information (containing tactical, operational, strategic and diplomatic implications) into decision and action, which in turn ensure intended end-states. It is specifically the end-state of *control*--control of people and territory--which the Army of Force XXI values and envisions as not being so much physically-imposed as rather "knowledge-imposed."⁹ The functional intellectual tools that translate raw knowledge into wisdom of action thus take on paramount importance. "This is the important link between information operations and the human dimension."¹⁰ For the tactical commander this link is unfortunately missing .

III. THE FIRST THREE STEPS TO SUCCESSFUL FULL DIMENSION OPERATIONS

" A victorious Army wins its victories before seeking battle."¹¹
Sun Tzu

The relationship of forethought and analysis in predisposing an army to victory is one of the oldest lessons in military history--a history which continues to produce ever-new instances of "blundering in kill zones." The military commander intellectually predisposes himself to success or failure by his ability to accomplish essentially three tasks:

- Understand the full scope of the problem and environment.
- Analyze all dimensions in detail to discern what is important.
- Link desired end-states with plans based on this analysis.

The simplicity of these basic steps belies the fact that, in practice, they can be difficult to accomplish. Aside from the variables of leadership, logistics and luck in military operations, it has not infrequently been *flawed situation analysis* and *failure to link these three tasks* in concert, that have spelled both military and political disaster. One has but to reflect on the narrow-mindedness of the French at Dien Bien Phu or the short-sightedness of Hitler in Operation Barbarossa--failures which underscore the criticality of intellectual and analytical preparations for operations.

Much is expected of General Sullivan's "nexus man" His pre-battle preparations have become increasingly important in light of the following stresses:

- The "zero defects" expectations of the military
- Ambiguous political and military end-states
- The decline of military force structure
- Increased OPTEMPO and PERSTEMPO
- Diversity of operational environments
- Wide range of potential missions
- Uncertainty of short-notice deployments
- Diversity of threats

All this places increased emphasis on him "getting it right the first time." "Right" analysis and mastering information operations thus emerge as the Army's "first-step" on the road to multi-spectral dominance.¹² The Revolution in Military Affairs, with its emphasis on hi-tech systems, must thus first defer to the needs of the human "system."

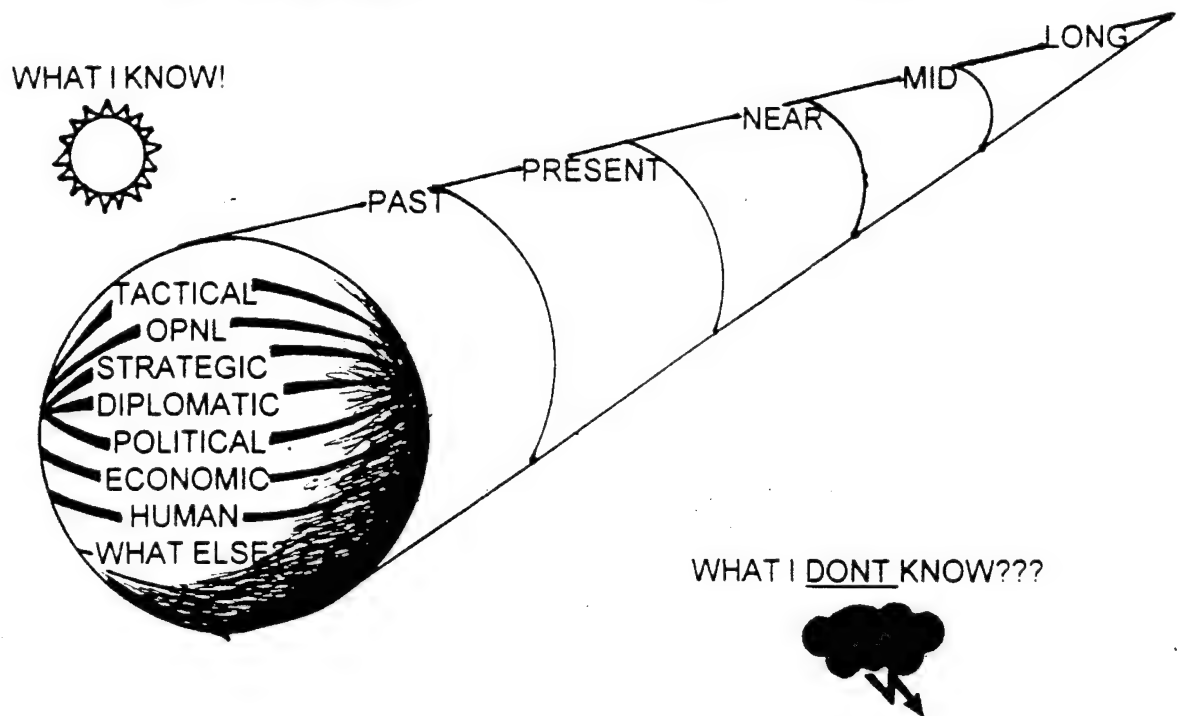
The evolution or revolution in how this system sees, thinks and analyzes can predispose him to victory.

A. FOCUSING BEYOND "TURF"

In spite of all the conceptual writings on *battlespace*, there is yet to appear a set of practical principles for systematically dissecting this multi-dimensional concept of "turf," and then deducing appropriate action (or in-action). Today's Army still tends to think of area of responsibility (AOR) in terms of *terrain*. FM 100-5 reflects this somewhat two-dimensional view in its depiction of AOR in terms of physical boundaries--theater of war, theater of operations, joint operation's area, etc. The FM goes on to state: ". . . CINCs focus their effort through the designation of an AO."¹³ It is precisely this limited focus that is ill-suited for General Sullivan's man at the nexus of tactical, operational, strategic and diplomatic "turf"--turf which may extend beyond a physically delineated AOR.

While designating a geographic AOR has an important function in military planning, its boundaries can tend to limit its owner's focus. In Vietnam "TAORS. . . often provided VC with room to operate in the "seams" between areas. . ."--theater areas of responsibilities thus proving to be inadequate in scope.¹⁴ Whether one adheres to General Sullivan's nexus model or prefers a more detailed depiction of the other potential dimensions of battlespace (the psychological, cultural, economic, etc), it is apparent that today's Army operates not in 2-3 dimensional areas, but in *multi-dimensional spheres*. The model in Figure 1 is illustrative of this reality and is intended to prompt the military mind to think "out of the box." Before carving it up into manageable sub-sets, the

SPHERE OF OPERATIONS



HOW MANY SPHERES IN BATTLESPACE?

FIGURE 1

commander and his staff must first grasp the fullest possible magnitude of the battlespace they are about to enter.

The model at figure 1 serves as an conceptual starting point--Step 1 in a 3-step process--for ultimately determining what types of information and operations belong (and don't belong) in a commander's battle focus. It is important to understand the limitations of this model, because it cannot, in and of itself, drive the commander logically to decision and action. The model which, however, may better serve this purpose, is one that gives definition to the gray or fog of battlespace. . . an architecture for conceptualizing what is *important*, what is *possible* (given unit capabilities) and what is *not important*. The U.S experience in Vietnam is of utility here, because four distinct spheres emerged to define Vietnam battlespace:

- Sphere of Responsibility
- Sphere of Influence
- Sphere of Importance
- Sphere of Consequence

In Vietnam the military was compelled to look beyond its assigned AOR to *important* "turf" in neighboring sanctuaries and even as far as the "turf" at home and in Paris. The *influence* of military operations reached far beyond its assigned boundaries and targets into political, psychological and personal realms. Finally, the *consequences* (both bad and good) of military action exceeded still again the bounds of AOR in terms of politics, perceptions, doctrine, ethics, environment, research and development technology--to name but a few "spin-offs."¹⁵

While each sphere is significant, it is the convergence of these spheres that produces distinctly different parts of battlespace's generic landscape--13 parts in all. . . .

each with a different reason for existing. . . . each with a different message for the commander in his battle focus development. This constitutes Step 2 of the analytical process which consists of the commander and staff (1) seeing these distinctions clearly and (2) understanding why they exist. (See Figure 2)

The table of Figure 3 further defines each of the 13 PARTS OF BATTLESPACE in terms of their meaning to a military planner. This step, Step 3, is intended to provide a mutually understood construct which enables all key participants to quickly assess and categorize incoming information, intel, tasks and orders; and then to deduce appropriate action. The mere common awareness of these distinctions both prior to and during operations can both enable and prompt commanders and staffs to consciously sort and process the massive volumes of information typical of full-dimension operations. This in turn can cause them to question or challenge things, request outside support, augmentation or advice, ask for adjustments in mission, boundaries, constraints or timetables, and knowingly accept or refuse risk. These all appear to be common sense actions, yet complex battlespace and high OPTEMPO can cause important distinctions to blur. . . sometimes with tragic results. The recent humanitarian assistance mission in Somalia, Operation Restore Hope, found the United States military pursuing a Somali warlord as a part of battle focus--a focus which arguably was pursued for one or several of the following reasons explained by an appreciation of battlespace's generic parts (See Figures 2 and 3):

- Part 5 - Operating in an area without *means* to deal with contingencies
- Part 10 - Operating in pursuit of objectives of *questionable importance*

THE 13 PARTS OF BATTLESPACE

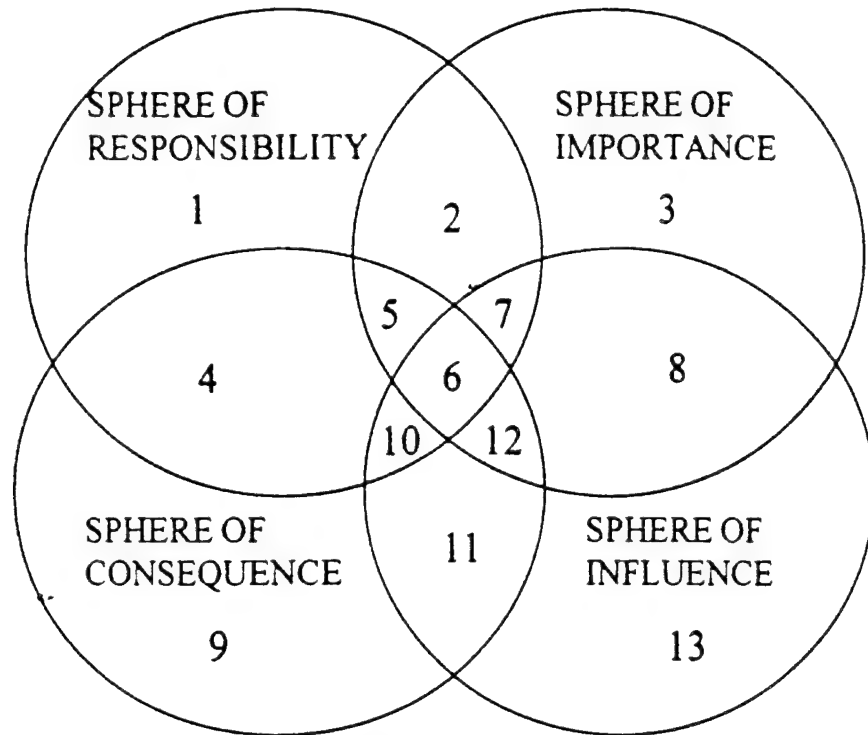


FIGURE 2

WHAT THE 13 PARTS MEAN

SPHERES					SIGNIFICANCE
	RESP	IMP	INFL	CONS	
1	X	0	0	0	NO INTEREST/NO RISK, BUT ON OUR TURF
2	X	X	0	0	ESSENTIAL, BUT BEYOND OUR CAPABILITIES
3	0	X	0	0	ESSENTIAL, BUT CAN + MAY NOT TOUCH
4	X	0	0	X	NO INTEREST... WE CAN ONLY REACT ANYWAY
5	X	X	0	X	ESSENTIAL/AT RISK, BUT NEED ASSISTANCE
6	X	X	X	X	ESSENTIAL AND WE CAN DEAL WITH RISK
7	X	X	X	0	ESSENTIAL AND WE CAN HANDLE WITH OUT RISK
8	0	X	X	0	ESSENTIAL, NOT OURS, BUT WE CAN HANDLE
9	0	0	0	X	NO INTEREST WHATSOEVER
10	X	0	X	X	NOT IMPORTANT/ OURS/ HANDLE IF WE WANT
11	0	0	X	X	NOT IMPORTANT/ CAN HANDLE O/O WITH RISK
12	0	X	X	X	ESSENTIAL, BUT CAN ONLY HANDLE O/O
13	0	0	X	0	NOT IMPORTANT, BUT CAN HANDLE O/O WITH OUT RISK

BATTLE FOCUS = 2,3,5,6,7,8,12 POTENTIAL OPS W/IN "REACH" = 11,12,13
 TIME/RESOURCES WASTERS = 1,4,9

FIGURE 3

- Part 12 - Operating *beyond* what should have been the *U.S. responsibility*

- Part 11 - A combination of Parts 10 and 12

This experience of "mission creep" in complex battlespace reveals two enduring lessons for Force XXI: First, the fine distinctions in battlespace *exist* and *matter a great deal*. Second, the "dark side" of battlespace is deadly and is distinguished by three types of knowledge deficiencies:

Uncertainty - The information a commander is conscious that he doesn't know

Ignorance - The information a commander is unconscious that he doesn't know

Stupidity - The beliefs a commander persists in that are not true

Whether it is the *tactical uncertainty* of RPGs in the anti-helicopter role, the *operational ignorance* of working in the constrained UN arena, or the *strategic stupidity* of not having well-defined end-states--the "dark side" can subject brave men unnecessarily to deadly battleground.¹⁶

It is no longer possible, prudent nor productive for commanders to confine their battle focus exclusively within a physical area of responsibility, because the immediate strategic and diplomatic implications of tactical operations demand broader focus. It is further critical that declining U.S. military forces be husbanded and finely focused in the face of the U.S. National Security Strategy of Engagement and Enlargement.

"Our engagement must be selective, focusing on the challenges that are most relevant to our own interests and focusing our resources where we can make the most difference. We must also use the right tools."¹⁷

To this end it is important for commanders and staffs to be able to divide battlespace intellectually into distinguishable parts that can aid analysis and planning by sorting information into categories that lead to deductions, conclusions and decisions--decisions to "use the right tools" for the mission at hand. FM 100-5's limited concept of AOR is unequal to this demand.

B. RETOOLING METT-T

"Using the analytical framework of mission, enemy, troops, terrain and time available (METT-T), commanders designate *physical objectives*. . . these become the basis for all subordinate plans."¹⁸

FM 100-5
Operations
June 1993

The METT-T analysis model and FM 100-5's strong reliance on it as the foundation of military planning, predispose the "man in the middle" to short-sighted and flawed analysis of full dimension operations. What is "enemy" supposed to mean in a disaster relief scenario? What relevance does "terrain" have when the ground to be negotiated on a United Nations peacekeeping mission consists principally of political, procedural and psychological obstacles? These questions hint that use of the time-honored METT-T may require extraordinary leaps of association in analysis to be meaningful in full-dimension operations. The lack of comprehensiveness of this combat construct is revealed by the face of a changing world and by the United States decision to employ its military arm more broadly than ever before. As evidence of this the Army has adopted four fundamental roles in its strategy for the 21st Century:

" . . . to compel those who fight U.S. to accede to our will."

"... deter those who might oppose us."

"... reassure our allies. . ."

"... support at home."¹⁹

It is then this broad charter that compels the military mind to "come out of the turret" and behold the tenets that define battlespace--tenets that defy a purely combat mentality and demand well more than FM 100-5's "physical objectives."

Mission

"To accept battle in haste is to fight without being sure of victory."²⁰

Mao Tse Tung

The aggressive mind-set that makes the military achiever "jump on" his mission and "do it!" has brought the United States not only stunning victory, but stinging defeat as well. Wading into tactical fights, without first weighing the situation's full strategic or diplomatic import, has placed commanders and soldiers in dilemmas in which both the *problem* and the military's *purpose* were misunderstood. Long years of war in Vietnam with near absolute dominance at tactical and operational levels nonetheless left the U.S. in defeat and retreat. The general consensus that the U.S. did not really understand the situation within Vietnam and consequently came to question its real purpose there reflects the issue of not "doing one's homework" and then applying the wrong formula to the problem--bombs and bullets apparently not able to "fix" what needed to be "fixed."²¹

The U.S. approach to regional challenges and threats in following years, such as the Soviet invasion of Afghanistan, the insurgency in El Salvador and the hostility of communist Nicaragua, have all reflected a finer situation analysis and measured U.S.

response. The recent U.S. relief effort in Rwanda further demonstrated the Vietnam lessons learned of first *assessing* the nature of the problem and then defining the specific, accomplishable purpose of U.S. forces. Instead of plunging into the mission, JTF Commander, LTG Schroeder, a Vietnam veteran, assessed the "turf," defined realistic, limited objectives, and tailored the force accordingly before commencing the relief mission proper.²² The old Army saying that "The mission comes first," thus gave way to the reality that "*Understanding the problem* comes first." Mission is thus subordinated to the broader analytical dictates of defining **PROBLEM** and **PURPOSE**.

Enemy

The "us versus them" mentality spawned by U.S. history and mythology reflects a black-white view of reality. The Army's 5-paragraph field order--the doctrinal format for military orders--juxtaposes "enemy forces" and "friendly forces" in depicting the military situation. The world today, however, is increasingly characterized by many shades of gray; what threatens friendly forces may not be an enemy force per se. The simplistic view of friend vs foe may hold true in scenarios where one monolithic force faces an opposing symmetrical force or a well-defined opponent on an isolated battlefield. The U.S. National Security Strategy, however, reflects a grander perspective on the challenges to national security. It confounds "us vs them" rationales and compels the military mind to re-think exactly who and what is of concern to a commander in his battlespace in the context of U.S. engagement and enlargement.²³

The word "enemy" invites narrow interpretation suggesting a person, people, unit or force. Recent world events suggest the case can be to the contrary. The U.S.

humanitarian relief to Rwanda was faced with arguably its largest threat in the form of disease--with chaos a close "second."²⁴ In Operation Safe Passage, the transfer of Cuban migrants from Panama to Guantanamo, the most significant threat to success was a potentially hostile and misinformed media that could damage U.S. legitimacy in the eyes of the world. The other potential threat consisted of "friendly" migrants, who for personal or psychological reasons, might unexpectedly attempt a desperate act in front of the media.²⁵ The fickle nature of the enemy was further demonstrated in the U.S. intervention in Haiti on OPERATION RESTORE DEMOCRACY, where the relationship between friend and foe ended up not being one of "attack and defend," but instead one of "cooperate." In fact, some feel the real threat to success in Haiti may turn out to be something as abstract as the lack of the population's ability to manage basic societal processes.²⁶ Threats to U.S. forces in certain situations may consist of such things as restrictive ROE, cumbersome and inefficient international or inter-agency procedures, the lack of unity of effort in combined operations, or even environmental pollution. The common threat in these examples is not "enemy," but is reflected in the larger concept of "threat"--a reality with many faces in the Army's business of COMPEL - DETER - ASSURE - SUPPORT.

"Threat" is not merely a re-naming of "enemy," but rather has far greater implications. It is subordinate to larger analytical constructs critical to comprehensive situation analysis--defining the *problem*, identifying all the *players* in battlespace and understanding all possible planning *parameters*. That is to say "threat" finds its true relevance within larger contexts. An example from the UNPROFOR mission in Bosnia-

Herzegovina is instructive on this point. A commander's mere knowledge of mercenary activity in his region is of little use to him unless it is analyzed in context. How do mercenary agendas, capabilities, and connections inside and outside the region define the current problem or potential problems for UNPROFOR? What are the range of relationships between the mercenaries and all other *players* in the region and what activities are therefore certain, probable, possible, uncertain, unlikely, and impossible? What planning *parameters* arise as a result of analyzing the implications of mercenary presence and activity? The point here is that threat analysis is but one factor of many needed in computing the larger building blocks of PROBLEM, PLAYERS and PARAMETERS. The deductions and implications of these can then drive the commander to action. At issue here is a fundamentally different approach to integrating threat into situation analysis in a way that logically progresses toward decision. "Threat" or "enemy" are therefore not analytical building blocks themselves, they instead find their importance within the context of larger constructs.

Troops

The "troops" part of the METT-T formula is intended to compel the commander to assess his *manpower resource* in the context of this situation. This narrow measure of unit capabilities and power is hardly a broad enough construct to properly assess the *total resources* necessary for tactical, operational, strategic and diplomatic success. In Vietnam the U.S. had over 500,000 troops on the ground at the height of conflict, while in El Salvador the manpower cap was set by Congress at 55--yet successful outcome bore no

relationship to manpower per se. What emerges from this reality are larger questions in the generation of "force" necessary for success:

Who are the PLAYERS?

What constitutes real POWER?

What PRINCIPLES work in applying power?

The participants present in battlespace span the spectrum from enemy to hostile to unaligned to neutral to friendly to unknown. One has but to consider the well-known images of Navy SEALs under media floodlights "infiltrating" Somalia, of medecins sans frontieres and U.S. Special Forces working together to save Kurds, or of a former U.S. president in a dictator's den in Haiti at D-3 hours with the 82d Airborne Division "in bound," in order to see that the cast of *players* now knows few bounds. While it once may have seemed simple--"command troops and kill the enemy,"--the verbs that now typify a commander's interaction with the broad array of players in his battlespace include not only "commanding" and "killing," but also "caring for," "convincing," "coercing," "compromising," and "co-opting." In view of this, and keeping in mind that the commander's duty is ultimately to *influence a desired outcome or end-state*, the intellectual challenge for him becomes one of knowing what kind of power to use effectively under the diverse circumstances of full dimension operations. Whereas a commander conducting counterinsurgent operations may have to resort to precise lethal power, his arsenal of power in a foreign internal defense (FID) setting may be completely different. COL James Roach, Commander 7th Special Forces Group (ABN), tells of a special forces warrant officer who subdued a high ranking corrupt commander, who was

in his day-to-day counterpart. A "lost" generator, destined for a schoolhouse built as a civic action project, mysteriously reappeared at the school when the local military commander was "advised" that his nation's "big brass" were coming to the school's official opening ceremony.²⁷ The warrant officer's situation analysis exceeded the capabilities of METT-T and reflected not only an analysis of *power* and the *principles* of its precise application, but also a keen appreciation of **PRIORITIES**.

Whether one is launching a precision Hellfire missile or placing a well-aimed phone call, the decision to do so transcends the intellectual skill of knowing *how to do it right* and enters the realm of wisdom--that is, knowing *why doing it this way now is right*. The implications of killing an insurgent or alienating an important and powerful counterpart underscores the importance of deducing well-defined *priorities* in situation analysis, as well as being cognizant of all the **POSSIBILITIES** associated with the situation in terms of techniques, options, contingencies and consequences. Without the wisdom born of a keen awareness of *priorities* and *possibilities*, analytical conclusions can produce decisions to "throw troops" heavy handedly at situations requiring finesse in the application of power. It is thus that METT-T's "troops"--seen in its broader essence as the *force* for accomplishing aims and ends--points to larger "force"-related building blocks:

- **PLAYERS**
- **POWER**
- **PRINCIPLES**
- **PRIORITIES**

- POSSIBILITIES

The detailed analysis of these larger constructs (as opposed to "enemy" and "troops") stands a greater likelihood of enabling success in full-dimension operations at both the macro and micro levels. The recent U.S. intervention in Haiti is evidence of this evolution in analysis. At the national level a diverse cast of *players* was orchestrated to create a synergy of *power* using the *principles* of overwhelming force and diplomacy, based on well-defined *priorities* focused first on removing corrupt authorities in an operation designed for the *possibilities* of "fighting" or "fixing" what ailed Haiti. This same type of analysis was reflected down to tactical levels, where analysis of "enemy" and "troops" was inadequate in generating the conclusions necessary for dealing with vengeance, voodoo and violence.²⁸

Terrain

FM 100-5's description of this construct is confined exclusively to a *physical* view of a conventional battlefield which includes climatic impacts.²⁹ While physical domain is key in the terrain equation, it is only part of it. As previously discussed the concept of "turf" in full-dimension operations extends into political, psychological and other realms. Another war in the Persian Gulf, for example, could conceivably include wide-spread terrorism against the U.S.--clearly reaching beyond Middle East terrain into psychological and political "terrain." We routinely talk of "political minefields," "diplomatic obstacles," "emotional climate," and "psychological barriers."--these along with the rise and fall of topography and temperature combine to define the features of the "terrain" to be negotiated in the Army's missions of *compelling*, *deterring*, *assuring* and *supporting*.

They essentially constitute the *parameters* that define the operational environment in terms of constraints, restraints, limitations and enablers that can facilitate or impede progress through battlespace. PARAMETERS therefore emerge as the essence of what "terrain association" seeks to define.

The "turf" in the complex battlespace reflected in Vietnam, Bosnia-Herzegovina, Somalia and Haiti embraces a wide range of "terrain features" that can make operations easy, hard or impossible. Physical terrain was as perplexing in Vietnam as it was enabling in Desert Storm, but it was the lack of definition of Vietnam's "turf" in terms of clear and attainable objectives to move toward that eventually bogged the U.S. down.³⁰ While Bosnia offers particularly inhospitable and rugged topography, the UNPROFOR is supremely challenged to navigate in and across invisible cultural and ethnic boundaries, as well as within the perplexing jungle and jumble of UN, NATO and factional policies, procedures and practices.³¹ Restrictive ROE, force structure limitations, imperfect interoperability procedures and "mission creep" combined to spoil U.S. operations in Somalia, just as certainly as the avoidance of these obstacles enabled the initial U.S. success in Haiti. It therefore is apparent that the FM 100-5's version of terrain needs broadening if it is to help "the man in the middle" map out and navigate his difficult trek through dynamic terrain with insight and foresight for understanding all the defining *parameters* of battlespace.

Time Available

Taking the vast dimension of time and shrinking its scope down to a mere matter of "time available" reflects the persistent short-sightedness of the military mind used to a

battle focus of "taking the next hill on schedule." The implications of "the temporal" far exceed the limited perspective of *time as an available resource of finite quantity* for mission accomplishment. What Force XXI Operations require is radical reconsideration of what time means in terms of its major divisions--past, present, and future. These have no intrinsic value, but instead constitute the *continuum of processes* that produce successful operations--that enable the transformation of concept into action and finally into ultimate endstate. It is therefore *process*, not time, that emerges as the important construct to be analyzed.

"Time availability" is of itself a concept as worthless to the modern commander as the whiteman's concept of snow is to the Eskimo. The native has no single word for snow, but rather some fifty words for the "white stuff"--each with special significance according to time, place and circumstance. Finer distinctions of "the temporal" are also of relevance to "the man in the middle"--timeliness, time-killers, time lag, timing, NET and NLT, timetable, time consuming, perishability over time, synchronization, time duration, time sensitivity. These, in turn, have no relevance unless considered in regard to their importance in accomplishing processes. Likewise, an analysis of past, present and future reveals the linkage of the past (knowledge) to the future (envisioned end-states) by means of the present (process). It is thus again that the "things of time" point to the larger issue of **PROCESS**. Time-availability has its proper place subordinate to *parameters*, just as "time sensitivity" may apply to certain aspects of *power*, or "time killer" may have significance in defining the *problem*. In the final analysis it is *process*, that keeps one off "the road to disaster" and "on track."

Time management was not enough to assure U.S. success in Vietnam. It is now apparent that beneath the triple canopy jungle there were on-going processes that were not fully appreciated in the U.S. analysis of the situation. The processes of corruption within South Vietnamese government and society, the indirect and direct processes by which the communists worked on the will of Vietnamese villagers and the U.S. public, the processes of colonialism and conquest by outside aggressors that had forged communist resolve--these low-tech processes combined to overmatch the highly efficient hi-tech processes by which the U.S. sought victory.³² The refinement of these hi-tech processes, by contrast, enabled U.S. dominance in Desert Storm, just as a refined appreciation of on-going processes in Bosnia has precluded the U.S. from unwisely wading into an unwinnable situation. The specific processes to be understood in situation analysis and the ones regarded as critical to success are not to be generically listed, but rather are situation-dependent. Better knowledge of the past, objectivity in assessing the present situation and clear articulation of future end-states will reveal those processes to beware of and those to be mastered. A full appreciation of these processes enables the commander and his staff to proceed beyond analysis to mission planning.

The review of METT-T in the face of the on-going, anticipated and uncertain challenges of a multi-polar world compel the need for a broader analytical construct for situation analysis. The nine building blocks below deduced from METT-T's shortcomings, constitute a more comprehensive and logically linked progression of analysis capable of driving commanders systematically to conclusions:

PROBLEM

PURPOSE

PLAYERS

POWER

PARAMETERS

PRINCIPLES

PRIORITIES

POSSIBILITIES

PROCESS

Together these constitute an umbrella under which METT-T finds its place within broader situation analysis that reveals "essentials" to the commander facing full-dimension operations. Using this framework the commander will be able to identify not only FM 100-5's "physical objectives," but also the other critical objectives in multi-spectral battlespace. This supports Force XXI's aim of "enhanced situational awareness."³³

C. THE ESSENCE OF THE BATTLEFIELD OPERATING SYSTEMS (BOS)

"Army leaders examine large complex operations in terms of functional operating systems that exist at each level of war."³⁴

The logic of FM 100-5 on the matter of *functional operating systems* has two faces: one which has well served past commanders at tactical, operational and strategic levels and one which is not structured to serve the tactical commander, who now is *not* able to plan and operate neatly within just one level of conflict. Complex battlespace, which compresses diplomatic, strategic and operational realities on top of the tactical commander, is a phenomenon to be faced by commanders at all levels for the foreseeable

future. Given the modern commander's challenge to handle unanticipated threats worldwide on short-notice, it follows that he could benefit from a single, but versatile construct for organizing full-dimension operations. The BOS itself is unequal to this challenge, as indicated by the example of the total lack of relevance of the Air Defense BOS in humanitarian relief operations--just one of many examples of BOS shortcomings. It is, however, in examining the *essence* of the BOS that more dynamic constructs are revealed--ones that better enable the commander and staff to think, plan and organize in broader contexts.

Battlefield Operating Systems versus "Full-Dimension" Operations Constructs
(Essence of BOS)

Intelligence	Battle Space
Maneuver	Operations
Fire Support	Power
Air Defense	Protection
Mobility-Survivability	Operations Enablers
Logistics	Resources
Battle Command	Battle Command

The following discussion is thus aimed at illustrating the need for more dynamic functional operating constructs for Force XXI.

Intelligence vs Battlespace

The problem with this BOS is in the word "intelligence" itself. *Intelligence* is fundamentally but a single enabling tool, which assists the commander in the overarching task of formulating an accurate picture of dynamic battlespace. TRADOC Pam 525-5's statement that Force XXI operations start with "information operations," reflects the recognition that success in murky battlespace has its "first steps" in attaining adequate knowledge of that battlespace.³⁵ This challenge transcends FM 100-5's focus on

intelligence operations principally in terms of "enemy" on "battlefields."³⁶ At issue here is the definition of the major building blocks that together constitute the environment of operations--the appreciation of which will enable a commander to attain his tactical, operational, strategic, if necessary, diplomatic endstates. This is the essence of intelligence.

The Army's traditional form of "appreciating the enemy" falls short of the knowledge of commander needs about such very real *threats* as adverse media coverage or the sometimes incompatible agendas of "allies." In Somalia, for example, an unconstrained media placed U.S. forces not only in tactical danger, but also in strategic and political danger. First, the initial positive image of the U.S. humanitarian relief effort thrust the military in the limelight as "saviors of humanity." The threat here for the military is reflected in the public perception that the military can "do it all." Second, the military's inability to tell its story first in the wake of the aborted raid to seize Ahdid, enabled the media to graphically depict its version of "ground truth," immediately putting the military on the defensive. The military thus found it had to manage not only the local battlefield, but political and psychological battlegrounds as well. "Knowing the battlefield" therefore includes not only an appreciation of topographic and climatic realities, but of realities ranging from restrictive ROE to political climate--realities which are part of defining battlespace well beyond the aspect of "enemy." The U.S. intervention in Rwanda was not shaped simply by "intelligence on the enemy," but instead by EUCOM's JTF first assessing a variety of inter-related aspects of "ground truth" that comprised a clearer vision of battlespace. It was this larger awareness of the total picture

(to include friendly and neutral aspects) that enabled the JTF to determine realistic and feasible objectives. The existence of a long-established infrastructure in the region limited the U.S. focus largely to establishing an air bridge and logistical transload sites.³⁷

In this light it becomes apparent that *intelligence* is too narrow a construct to give the modern commander full appreciation of all the aspects of battlespace that constitute the *threat* and *environment* he must face. The following subsets of battlespace provide better definition of the fog of war (and of OOTW) and provide the basis for developing military options and plans:

- The Dimensions
- The Problems
- The Players
- The Threats
- The Powers
- The Climate
- The Parameters
- The Temporal

The interrelationship of these gives further definition to the landscape of battlespace. It is the conclusions deduced from these relationships that can drive the commander to specific action. For example, in SOUTHCOM's movement of Cuban migrants to Guantanamo the implications of maintaining U.S. legitimacy in the eyes of others, the problem of migrant frustration over not reaching the U.S.A., the presence of the media and special interest groups, the threat of violence "staged" for the media, and the climate of anticipation generated by all on-lookers, combined to drive the commander to specific action. The CINC staged a "pre-emptive strike" by inviting the press to a tell-all, show-all media day, which defused a potentially dangerous situation and paved the way to

successful operations.³⁸ This success was enabled by a broader appreciation of things not "targetable" by SOUTHCOM's intelligence apparatus.

What then distinguishes the BATTLESPACE construct is first, its *breadth of focus* on all relevant aspects beyond "enemy" and "battlefield," and second, the *synthesis of the relationships of these aspects into conclusions* that drive the commander to decision and action. It is here that the 13-part battlespace model (Figure 2) has its purpose in aiding planners to categorize conclusions according to their importance in unit battle focus.

Maneuver vs Operations

While the Maneuver BOS is popularly associated with the *movement and positioning* of forces, the essence of maneuver is seen in its ultimate aim--"to gain positional advantage."³⁹ The question is then logically--*where* in battlespace must the commander gain and maintain positional advantage? The dynamic nature of modern battlespace dictates a relook at traditional divisions of the battlefield. Each of these, however, seen in their broadest essence, point to more suitable divisions of battlespace to be dominated in full dimension operations.

<u>The Maneuver BOS</u>	versus	<u>Operations</u>
Deep		Beyond the Assigned AOR
Security Zone		Transition Areas and Seams
Main Battle Area		AOR
Reserve		Contingencies, Opportunities, Areas for Exploitation
Rear		Vulnerabilities

The commander in humanitarian assistance operations may have no *deep battle* per se, but may have *areas of interest, influence and consequence* that exceed his

authorized AOR. The commander of a NEO force does not have a *security zone* in the traditional battlefield sense, but must be keenly aware of the many *important seams and transitions* that exist in the intricate business of extracting non-combatants in a chaotic and hostile multi-national environment. The unit supporting counter-drug operations may not have a physical *main battle area*, but instead may have *functional areas of responsibility* that cause its soldiers to be spread across several countries. The FID trainer does not have a *reserve*, but must be ever on the lookout for *opportunities* to exploit or *contingencies* to execute within his broader mission of nation-building. The commander supporting combat search and rescue operations is not concerned about his *rear*, but is instead focused on the issue for force *vulnerabilities*. Even the maneuver term "positional advantage" begs broader interpretation, since in OOTW and in combined and inter-agency arenas it can be the intangible "moral authority", "psychological advantage," "U.S. legitimacy," or "personal credibility" that puts the commander in positions of ultimate advantage. For example, British peacekeepers in Northern Ireland, as well as U.S. peacekeepers in both Beirut and Somalia found that they lost "positional advantage" once they were "perceived" as not being neutral. This had nothing to do with physical "maneuver." This broader essence of "maneuver" is not intended to preclude commanders from taking a traditional focus of the battlefield, it is rather aimed at compelling him to "think out of the box" in terms that will better assure him "advantage" in all dimensions of battlespace.

Mobility and Survivability vs Operations Enablers

The combat engineer tasks one normally associates with this BOS are ill-equipped to deal with the diverse obstacles, "minefields" and force vulnerabilities in Force XXI's battlespace. Here the impediments to forward progress take on non-traditional, as well as traditional form--"red tape," ambiguous measures of success and poor coordination are just as sure to bog down operational momentum, as will a well-constructed obstacle belt with covering direct fire.⁴⁰ It is thus in discerning this BOS's intended endstate--the enabling of operations momentum and continuity--that a viable planning construct for full-dimensional operations is revealed.

TRADOC Pam 525-5's emphasis on the important role of operational tempo control in Force XXI Operations is predicated on the stated intent that a commander must be able to "pulse" operations at the right place and time.⁴¹ The demands of complex battlespace place a premium of tempo control as never before. Of greater concern now to the commander, than his narrow list of important engineer tasks is the larger issue of identifying and accomplishing the major enabling tasks that keep his operations alive, responsive and focused.

A commander conducting peacekeeping and humanitarian assistance operations in Bosnia-Herzegovina, for example, faces even in the simplest tasks, complexities born of politics and UN procedures that confound his attempts to translate commander's intent into action and then into desired endstates.⁴² Just as a NATO jet, flying a retaliatory strike in support of UNPROFOR, must be carefully guided all the way from planning concept to target strike and back, so also is the launching of an Army mission into

complex battlespace equally demanding. The successful progression of an operation along its "critical path" has historically been based on the following linked building blocks, which ultimately ensure the *mobility* and *survivability* of the operation:

OPERATIONS ENABLERS

- Vision
- Plans
- Process
- Means
- Awareness
- Flexibility
- Recuperability
- Durability

These are what have traditionally give the commander "freedom to maneuver" and the ability to control optempo and "pulse" at will.

In the same way a minefield breach must be linked by routes and river crossings to an objective, so also must *operations enablers* be linked and oriented on end-states.

Modern history offers convincing examples of getting "bogged down" as a result of failures in understanding what was ultimately essential for "mobility" and "survivability."

The disastrous Nazi invasion of Russia resulted from vague end-states and inadequate means to ensure continuous operations.⁴³ The U.S. approach to Vietnam revealed poor linkage between means and end-states--B52 "Arc Lights" and other forms of lethality proving to be poorly linked to the goal of gaining Vietnamese support.⁴⁴ The UN predicament in Bosnia-Herzegovina again shows the inescapable consequences of ambiguous endstates, ill-defined supporting objectives, restrictive procedures and inadequate means to actually correct what is wrong in the region.⁴⁵ While each of these environments contain no shortage of mobility and survivability tasks for combat

engineers, the reasons for getting "bogged down" clearly exceed the capabilities of bulldozers and Bailey bridges.

The commander and staff who concentrate on the larger criteria for *enabling operations continuity* will logically deduce the practical steps to be taken in breaching, bridging and negotiating whatever might impede, impair or kill the operation and the ability to "pulse." Freedom of maneuver is thus not so much the result of engineer tasks well done, as it is the end-product of a more dynamic "engineering" effort. . . . well thought-out and linked to clear end-states.

Logistics vs Resources

The logical follow-on to the intellectual engineering of operations continuity is then the organization and orchestration of all concrete *means* that make operations possible. These, however, transcend the realm of the logistics BOS, which would delegate this dynamic task to J4s, G4s, and S4s. FM 100-5's concept of logistics (in its traditional sense) stands in contrast to the larger issue of *resources*--the total resources necessary to accomplish operations.

The existence of logistical service, support and materiel is critical, but is merely part of a larger equation. This equation demands that the commander integrate all his resources in synergistic effect to create the power and to enable the processes essential for successful operations. For example, successful U.S. intervention in Haiti was not so much a matter of logistics, as it was based on the orchestration of a wide-range of resources. Two aspects of resources bear emphasis. First, *total resource visibility* (unlike total logistics visibility) gives the commander a complete menu of available means to

handle challenges which span the spectrum from killing tanks to training third-world forces to supporting disaster relief. Second, it is the *combination of various means* at his disposal that actually enable the commander to meet these challenges. For example, the availability of a linguist (critical to a commander in counter-insurgency, foreign internal defense or peacekeeping operations) is almost meaningless to him, unless it is linked to other resources--transportation to move him to the right place, protective forces to cover him as required, knowledge about his target audience, subject-matter expertise requisite for the missions assigned, time available to accomplish tasks. For this reason the narrow focus of the Logistics BOS is ill-prepared to give the commander the "total asset visibility" he needs to create a synergy of effects.

Full dimension operations require efficient integration and orchestration of finite resources--these constitute a commander's "basic load" for battle. A broader view of "basic load" includes the following:

- Forces
- Materiel
- Support
- Services
- Information
- Skills
- Capabilities
- Time

Given a commander's grasp of *battlespace, power, protection and operations enablers*, he can then orchestrate *resources* for employment in any chosen area of operations. It is this integrated "packaging" of resources at the right place and time that closely reflects and supports Force XXI's concepts of "pulsing" operations and creating "synergistic efforts" to "overmatch" opponents.⁴⁶ The resource package used to leverage

the Haitian Dictator Cedras was a mix of military might and mental manipulation. The orchestration of PSYOP leaflet drops on the tail of B52 strikes in Desert Storm similarly reflects *resource packaging* delivered at the right place and time. By contrast, the commander who fails to integrate his "basic load" can open the door to failure. A well equipped war-fighting infantry commander or similarly equipped peacekeeper can be hobbled by intelligence or informational shortfalls. A well-informed unit can be rendered ineffective through the lack of critical skills, such as linguistic or counter-sniper skills. For these types of reasons (and their broader implications in joint, combined and inter-agency operations) the logistical logic of *computing beans and bullets to kill bad guys* must stand aside to the broader concept of total *resource visibility and integration*. The commander can then apply his resources in concert appropriate for the given situation. These resources extend well beyond the logistician's focus.

Battle Command (FM 100-5) vs Battle Command for Full-Dimension Operation

Today's commanders still are in want of a comprehensive concept of battle command capable of serving them in full-dimension operations. FM 100-5's concept has been supplemented with an OOTW perspective in the form of FM 100-20 (Draft).⁴⁷ This patchwork method of defining what is arguably the most important BOS, leaves commanders with a less-than-comprehensive vision of battle command. The practitioners of command who face diverse environments around the world are in need of a coherent and systematic battle command architecture that is flexible enough to cross-walk from one situation to the next. The mere description of command in battle and of the peculiarities of command in OOTW together do not properly capture nor convey the

practical building blocks of battle command. These are essential to "the man in the middle," if he is to wage the diverse "battles" that go with the army missions of COMPEL, DETER, ASSURE and SUPPORT.

FM 100-5's concept of battle command is a combat-oriented narrative using truisms that few can contest--"decision making is knowing if to decide, then when and wait to decide. . . to command is to direct. . . leadership is taking responsibility. . . "48 The problem with this descriptive narrative is that it is largely battlefield oriented, and does not address command vis a vis the broader *battles* as defined by Department of the Army. There is no mistaking that FM 100-5's battle command concepts can cross-walk into non-combat settings, but FM 100-5's concept does not explore this. This reflects the U.S. National Military Strategy's insistence that "the fundamental purpose of the Armed Forces must remain to fight and win our nation's wars. . . "49 The U.S. National Security Strategy, however, clearly states: "First, the primary mission of our Armed Forces. . . is to deter and, if necessary, win conflicts. . . "50 The difference in verbiage is striking, because it is clear that the National Command Authority is stressing *deterrence* as the "first strike" and *winning conflicts* (not just wars) as the contingency. "Thus, balanced U.S. forces are needed in order to provide a wide range of complementary capabilities and to cope with the unpredictable and unexpected."51 A "balanced" perspective on battle command is similarly appropriate in not only *coping with* the "unpredictable and unexpected," but in *dominating* them when they challenge the commander..

It is the Joint Universal Task List (JUTL) that provides the basic architecture for command and control at all levels in terms of five dominant tasks:52

- Acquire
- Assess
- Determine
- Direct/Lead
- Employ C2W

FM 100-5's architecture, by contrast, is based on three tasks:⁵³

- Assimilating thousands of bits of information
- Assessing the situation
- Directing military action

Two distinctions between these architectures are important: First, FM 100-5's list does not address the cornerstone command task of *acquiring both knowledge and information prior to operations*. Second, "directing military action" in FM 100-5's authoritarian rendering of command and control, does not address the broader implications of JUTL's "employ C2W" in joint, combined and inter-agency environments. Here strategies, operations and tactics may not be accomplished by *authoritative* command and control methods, but instead by more indirect or non-traditional means that, nonetheless, can enable a commander to ultimately "command the situation" and "control outcomes" through *influence*.

Acquire. This JUTL first step to command and control has broad implications for "the man in the middle." The wide array of potential threats, missions and environments today put greater emphasis on the personal knowledge, experience, expertise and wisdom of the commander.

"Leaders will have a keen awareness of the world and the role of military force in that world. . . be skilled in synchronizing and harmonizing all aspects of combat and non-combat operations. . . will be called upon to make rapid, doctrinally sound decisions. . . in more diverse, high-pressure operational environments."⁵⁴

This Force XXI dictate places clear priority on the *pre-battle preparation* of commanders. A commander who doesn't know where or how to access critical compartmentalized intelligence, does not understand the difference between a defense attache' and a MILGROUP commander, does not know what medecins sans frontieres can and cannot accomplish, does not know the extent of SOF capabilities and limitations, and who thinks the principle of overwhelming combat power wins hearts and minds, is little more than a well-intentioned leader, who will have difficulty "commanding the situation." The alert to deploy on short-notice is no time for one-who-would-command to try to establish his foundation of knowledge. When he is told "You will be OPCON to a British-led CJTF conducting rear area humanitarian assistance in the "Near Abroads," working closely with MSF, Red Crescent and Deutschcer Bergwacht. . ."--these words, acronyms and concepts need to have meaningful implications to him--not be sources of bewilderment. Given the commander's pre-battle acquisition of knowledge and expertise, the subsequent acquisition of battlefield information can then be accurately assessed by him and turned into wisdom of action.

Command and Control. Despite U.S. commanders' in-bred desire to directly command and control at will, complex battlespace can challenge and confound this instinct. The reality today is that a commander may not legally be authorized to dictate anything to a faction, give direct orders to an NGO or PVO, or command an ally. He may instead have to coerce, co-opt, negotiate, arbitrate, compromise or cooperate *as an equal* with assorted players in his battlespace--the end-state being "to influence desired outcomes." This itself can constitute "battle" of complex proportions for even a well-

prepared commander. It also underscores the vital role a commander plays in multi-national and inter-agency operations or in sensitive situations with severe strategic and diplomatic consequences--situations where a heavy-handed commander can unwittingly sabotage his unit's potential success. It is thus the commander's foreknowledge of the situation he would command and the players he seeks to control, that can aid him in selecting direct or indirect approaches to command and control. This principle applies to attacking fortified positions as certainly as it applies to dislodging obstructionists to progress.

The widening of the battle command spectrum to encompass LIC and OOTW places a premium on foreknowledge and the "indirect approach" in a commander's battle mathematics. Modern battle command, thus, is not merely a matter of knowing "what to do" once deployed on battleground, but more importantly a matter of knowing "the right things" *before* the deployment takes place. In this light FM 100-5's concept needs only to incorporate a broader sense of battlespace and an emphasis on indirectly influencing the situation and desired outcomes.

The relationship between the Battlefield Operating Systems and the broader constructs derived from their essence clearly indicate the BOS's solid foundation as a bridge to planning full-dimension operations. The BOS logically retains its utility in certain situations, but is not properly developed to meet all the needs of the commander at the nexus of diverse spheres. The unit that can tactically dominate an enemy with the synergy of lethal and non-lethal power, negotiate the operational obstacles and minefields of the inter-agency and combined operations, and leverage various players to act

according to U.S. strategic interests--all without diplomatic embarrassment--is a force that grasps the grander essence of the BOS. This is also a force that more closely represents TRADOC PAM 525-5's vision of Force XXI.

IV. CONCLUSION

"The abiding theme in 20th Century military history is that the changing character of modern war long ago turned the corner on conventional military practice. . ."⁵⁵

The limitations of old intellectual constructs in U.S. Army operations planning stand bare before today's military challenges. Readiness for war, combined with rising U.S. military involvement in OOTW illustrate the demand for more dynamic analytical tools. The Army's vision of the 21st Century further underscores the inadequacies of the tactical commander's current intellectual tools for planning full-dimension operations. The historical and hypothetical examples presented, as well as the discussion of shortfalls and short-sightedness in conventionally approaching complex battlespace, repeatedly indicate that tactical and operational intellect alone are not sufficient for commanders at the nexus of diverse spheres of operations. The "flattening" of the military hierarchy is a trend which increasingly pushes sensitive decisionmaking to the lowest levels. No longer can the commander on the ground view his environment in purely tactical or operational terms, because his decisions and his soldiers action or inaction potentially carry strategic and diplomatic consequences. The scattered wreckage of a Pan Am jumbo jet across the Scottish countryside of Lockerbie, potentially linked to the tactical decision of USS Vincennes to unwittingly shoot down an Iranian airliner, stands as a testament to this evolution of battleground. This change in reality for the military commander dictates a

corresponding change in how he views battlespace, analyzes complex situations and organizes for full-dimension operations.

In contrasting the paper's two sets of planning constructs it is important to first distinguish which one better serves as an overarching architecture for full-dimension operations planning, and then which one is properly subordinate to that architecture. In this light, the evidence of the tactical/operational constructs of area of operations, METT-T and BOS indicates they belong subordinate to larger constructs. They thus emerge as functional enablers within a broader planning architecture. These solid tactical and operational constructs not only continue to serve ground commanders as before, they also serve as intellectual bridges to understanding this broader architecture which encompasses the strategic and the diplomatic. The intellectual leap to be taken lies in rethinking the old familiar constructs in terms of their essence--essence to be weighed in the broadest context of battlespace's potentially diverse dimensions.

Force XXI's vision of multi-spectral dominance of a wide-range of lethal and non-lethal battleground reflects a logical evolution in power protection and force application in consonance with the present U.S. national security strategy. Similarly three new planning constructs for full-dimension operations evolve from the essence of old constructs:

Spheres of Operation

The 9 P's of situation analysis

Full-dimension operations constructs

These reflect an evolution from a tactical/operational battle focus to a more mature, multi-spectral focus--one that can handle the rigors of complex battlespace. These evolutionary constructs are linked building blocks, each with distinct functions, but which together constitute a seamless intellectual process--a process that can rapidly, efficiently and effectively transform raw information into vision, conclusion, decision and action. This intellectual ordering of information and ideas in situational analysis and operations planning supports Force XXI's stated intent to "orchestrate apparent chaos on the battlefield--with patterns understood by the US commander and coalition partners."⁵⁶ This ability to see clearly amid chaos is a function of intellectually being able to discern the fundamental nature and critical detail of the concept of modern battlespace, grasp the broad implications of multi-spectral situation analysis, and organize and orchestrate operations at one level according to simultaneous tactical, operational, strategic and diplomatic dictates. Without such a common vision and commonly understood means for sorting massive information into meaningful, manageable knowledge, a command would logically be intellectually predisposed to disunity and loss of battle focus.

The nation's high expectation for military success is reflected in the following statement from TRADOC Pam 525-5: "Failure in early entry operations will have major strategic consequences for follow-on military action or prevent action altogether."⁵⁷ It is the emphasis on early tactical and operation success that compels the Army to seek every advantage in the pre-deployment preparation of its forces. Given the proven tactical and technical proficiency of soldiers, it is then the commander and his staff that are critical in complex battlespace. While the Revolution in Military Affairs focuses largely on hi-tech

tools of war, it is rather the mental manipulators and orchestrators of those tools who need attention. In turn, it is their intellectual analytic tools that ultimately will empower them to do the right thing at the right time with the right technology on short-notice around the world in order to *compel, deter, assure* and *support*. To this end the Army's intellectual approach to situation analysis and operations planning for full-dimension operations needs to evolve beyond Cold War mindsets, if Force XXI is to succeed in an uncertain and challenging 21st Century.

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